

CUMULATIVE INDEXES

CONTRIBUTING AUTHORS, VOLUMES 53-57

A

- Abboud, H. E., 57:297-309
Albertine, K. H., 55:227-48
Alger, J. R., 54:827-46
Alper, S. L., 53:549-64
Altenberg, G., 53:361-73
Andersen, O., 53:341-59
Ando, Y., 56:711-39
Andreoli, T. E., 54:29-50
Andresen, M. C., 56:93-116
Armitage, J. P., 54:683-714
Ashmore, J. F., 53:465-76

B

- Bailey, C. H., 55:397-426
Baker, K. M., 54:227-41
Balaban, R. S., 52:523-42, 727-46

- Bansil, R., 57:635-57
Barchi, R. L., 57:355-85
Baxter, G., 55:785-817
Bell, G. I., 54:991-30
Benos, D. J., 53:509-30
Bergman, R. N., 54:861-83
Biber, J., 54:67-79
Blackburn, K., 54:257-77
Bland, R. D., 54:373-94
Block, B. A., 56:535-77
Block, G. D., 55:661-81
Blumer, K. J., 53:37-57
Boggaram, V., 53:415-40
Booz, G. W., 54:227-41
Border, W. A., 57:279-95
Boulton, C. L., 57:683-706
Boyer, J. L., 54:415-38
Bradley, D. C., 54:861-83
Braun, A. P., 57:417-45
Breer, H., 54:665-81
Brent, G. A., 53:17-35
Breslow, J. L., 56:797-810
Breyer, M. D., 56:711-39
Broaddus, V. C., 55:209-26
Brody, J. S., 54:351-71
Burggren, W. W., 53:107-35
Busath, D. D., 55:473-501

C

- Cain, B. D., 55:323-47
Campbell, D. L., 54:279-302
Carafoli, E., 53:531-47
Carey, D. J., 53:161-77

- Caron, M. G., 53:497-508
Carter, P. A., 56:579-621
Cherrington, A. D., 54:847-60
Chew, C. S., 56:445-61
Chien, K. R., 55:77-95
Clemons, D. R., 55:131-53
Cohick, W. S., 55:131-53
Coleridge, H. M., 56:69-91
Coleridge, J. C. G., 56:69-91
Collins, S., 53:497-508
Colquhoun, D., 57:469-93;495-519
Cooper, J. A., 53:585-605
Corbin, J. D., 56:237-72
Crowe, J. H., 54:579-99
Crowe, L. M., 54:579-99
Cummings, T. A., 54:715-31

D

- D'Amore, P. A., 53:217-39
Dawson, D. C., 53:321-39
DeBiasio, R. L., 55:785-817
Dietz, H. C., 56:763-96
DiFrancesco, D., 55:455-72
Dobbs, L. G., 53:395-414
Doberstein, S. K., 53:653-81
Doerschuk, C. M., 57:97-114
Dostal, D. E., 54:227-41
Douglas, J. G., 56:649-69
Drazen, J. M., 57:151-70
Dunlap, J. C., 55:683-728
Dunn, M. J., 55:249-65

E

- Ebashi, S., 53:1-16
Edmonds, B., 57:469-93;495-519
Eskin, A., 55:729-53
Evans, G. S., 56:399-417
Evans, S. M., 55:77-95
Ewton, D. Z., 53:201-16
Exton, J. H., 56:349-69

F

- Faraci, F. M., 53:59-70
Farkas, D. L., 55:785-817
Ferris, C. D., 54:469-88
Fewtrell, C., 55:427-54
Field, L. J., 55:97-114
Field, M., 55:631-55
Fineman, J. R., 57:115-34

- Fischer, J. A., 54:67-79
Fischer, T. A., 57:805-26
Flatman, P. W., 53:259-71
Flint, N., 56:399-417
Florini, J. R., 53:201-16
Forstner, G., 57:585-605
Francis, S. H., 56:237-72
Frank, J. A., 54:827-46
Franzini-Armstrong, C., 56:509-34
French, A. S., 54:135-52
Freudenrich, C. C., 53:273-87
Friesen, W. O., 55:661-81
Frizzell, R. A., 56:371-97
Funder, J. W., 55:115-30

G

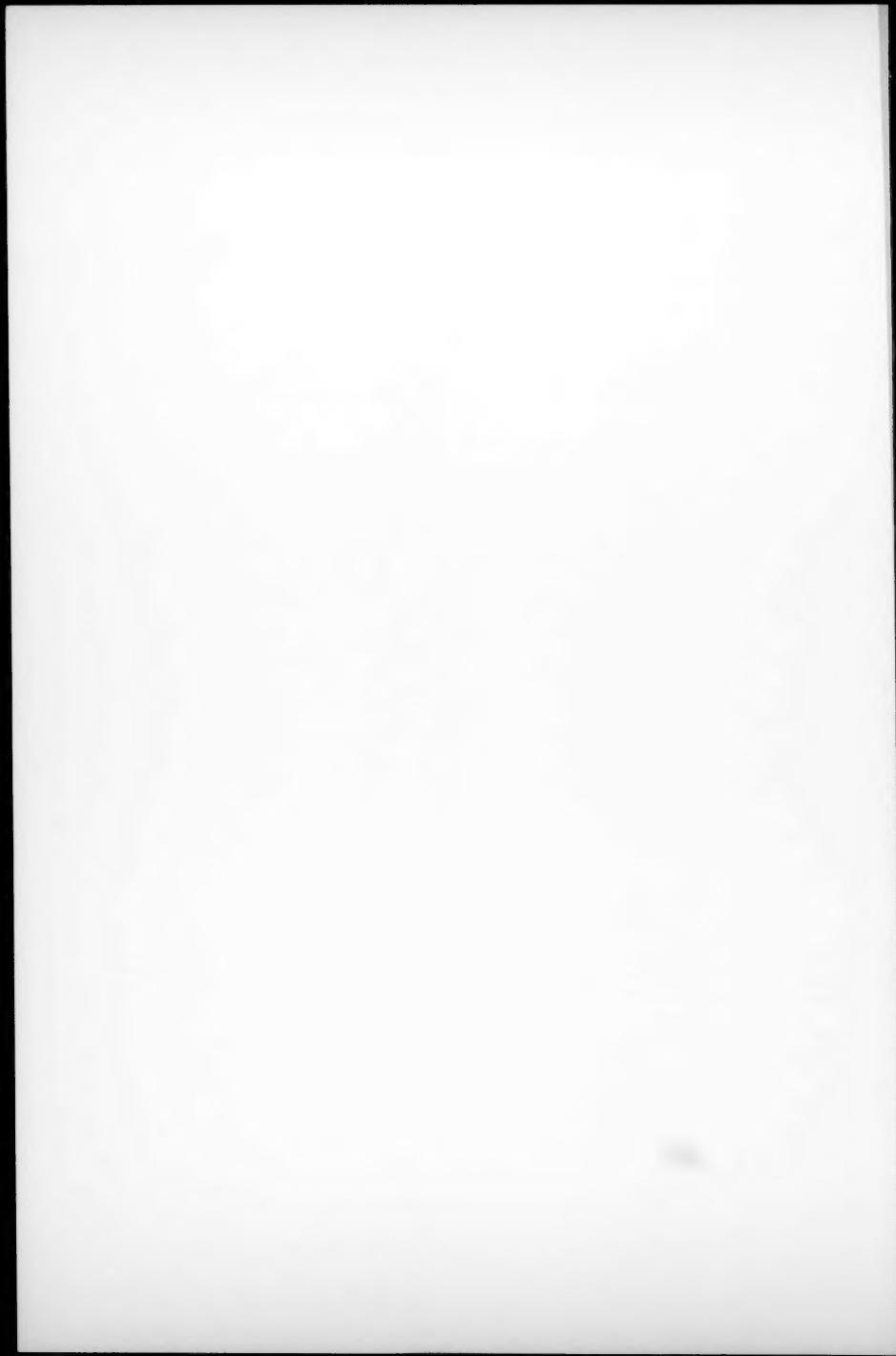
- Gadsby, D. C., 57:387-416
Gantner, D., 56:811-29
Ganz, T., 54:331-50
Garland, T., 56:579-621
Garthwaite, J., 57:683-706
Gasic, G. P., 54:507-35
Gaston, B., 57:151-70
Gee, M. H., 55:227-48
Gendler, S. J., 57:607-34
Gerisch, G., 53:607-28
Gibb, A. J., 57:469-93;495-519
Giebisch, G., 54:81-96
Gillies, R. J., 54:733-48
Githens, S., 56:419-43
Good, D. W., 56:623-47
Gooley, P. R., 54:749-73
Gough, A., 55:785-817
Graf, J., 54:415-38
Granger, N., 57:311-32
Granner, D. K., 54:885-909
Gray, R., 54:489-505
Green, W. N., 53:341-59
Griffith, O. W., 57:707-36
Gross, N. J., 57:135-50
Gross, S. S., 57:737-69

H

- Haagsman, H. P., 53:441-64
Hammerman, M. R., 55:305-21
Hardaway, L. A., 54:749-73
Hatt, H., 54:665-81
Hawgood, S., 53:375-94
Hazel, J. R., 57:19-42
Hazinski, T. A., 55:181-207

- Herzlinger, D., 56:671-89
 Hescheler, J., 52:257-74, 275-92
 Heymann, M. A., 57:115-34
 Highsmith, R. F., 54:257-77
 Hinrichsen, R. D., 53:309-19
 Hocker, C. G., 55:661-81
 Hoekstra, F. A., 54:579-99
 Hoffmann, S., 56:811-29
 Hogg, J. C., 57:97-114
 Hollmann, M., 54:507-35
 Holtzman, M., 54:303-29
 Homcy, C. J., 53:137-59
 Hoover, R., 57:171-89
 Hopfer, U., 56:649-69
 Horisberger, J.-D., 53:565-84
 Hostetter, T. H., 57:263-78
 Hwang, T., 57:387-416
- I
- Inagami, T., 57:171-89
- J
- Jackson, M. B., 57:447-68
 Jaffe, D., 54:489-505
 Jan, L. Y., 54:537-55
 Jan, Y. N., 54:537-55
 Janmey, P. A., 56:169-91
 Jefferson, L. S., 56:321-48
 Johnston, D., 54:489-505
 Jones, J. H., 55:547-69
 Jorgensen, A. O., 56:509-34
 Josephson, R. K., 55:527-46
- K
- Kandel, E. R., 55:397-426
 Kaplan, J. H., 52:853-55, 897-914
 Kasai, H., 56:297-319
 Kaupp, U. B., 54:153-75
 Ketteler, M., 57:279-95
 Kimball, S. R., 56:321-48
 King, R. J., 56:13-45
 Kink, J. A., 53:309-19
 Kinnaman, S. C., 54:215-31
 Klagsbrun, M., 53:217-39
 Knowlton, K. U., 55:77-95
 Koch, K., 54:153-75
 Komuro, I., 55:55-75
 Kono, T., 56:273-95
 Koretsky, A. P., 54:799-826
 Kornhauser, J. M., 55:729-53
 Korthuis, R. J., 57:311-32
 Koumenis, C., 55:729-53
 Kraehenbühl, J.-P., 53:656-84
 Kung, C., 53:309-19
 Kunze, D. L., 56:93-116
 Kusuoka, H., 54:243-56
- LaMont, J. T., 57:635-57
 Larsen, P. R., 53:17-35
 Lawrence, J. C., 54:177-93
 Lefkowitz, R. J., 53:497-508
 Lemas, V., 53:565-84
 Lester, H. A., 53:477-96
 Levi, R., 57:771-90
 Levitan, I. B., 56:193-212
 Lewin, M. J. M., 54:455-68
 Li, C. G., 57:659-82
 Lichtenberger, L. M., 57:565-83
 Lieberman, M., 53:273-87
 Lindstedt, S. L., 55:547-69
 London, R. E., 53:241-58
 Lutz, P. L., 54:601-18
- M
- Maack, T., 54:11-27
 MacKenzie, N. E., 54:749-73
 Magri, K. A., 53:201-16
 Makino, H., 56:273-95
 Manganiello, V. C., 56:273-95
 Marban, E., 54:243-56
 Mather, J. P., 57:219-44
 Mathieu-Costello, O., 55:503-25
 Matsuda, H., 53:289-98
 Mayer, E. A., 54:395-414
 McGehee, D. S., 57:521-46
 McNaughton, B. L., 55:375-96
 Mehler, E. L., 56:213-36
 Meier, P. J., 54:415-38
 Meissner, G., 56:485-508
 Mendelson, C. R., 53:415-40
 Miller, S. B., 55:305-21
 Miller-Hance, W., 55:77-95
 Milson, W. K., 53:87-105
 Minoo, P., 56:13-45
 Moore, D. D., 53:17-35
 Morad, M., 53:299-307
 Morel, F., 54:1-9
 Morris, A. P., 56:371-97
 Muff, R., 54:67-79
 Muret, H., 54:67-79
 Murphy, E., 53:273-87
- N
- Nabel, E. G., 56:741-61
 Nabel, G. J., 56:741-61
 Nagel, G., 57:387-416
 Naruse, M., 57:171-89
 Nederlof, M. A., 55:785-817
 Nielsion, D. W., 54:373-94
 Noble, N. A., 57:279-95
 Noegel, A. A., 53:607-28
- O
- O'Brien, T. X., 55:77-95
 O'Shea, M., 55:305-21
 Olah, M. E., 54:211-25
- P
- Pagliassotti, M. J., 54:847-60
 Palmer, L. G., 54:51-66
 Pane, D., 55:785-817
 Pane, J., 55:785-817
 Parker, T. G., 53:179-200
 Patek, D. R., 55:785-817
 Paul, M., 56:811-29
 Pessin, J. E., 54:911-30
 Petersen, C. C. H., 56:297-319
 Petersen, O. H., 56:297-319
 Pfeffer, J. M., 57:805-26
 Pfeffer, M. A., 57:805-26
 Pilikis, S. J., 54:885-909
 Pinder, A. W., 53:107-35
 Pittendrigh, C. S., 55:17-54
 Pizarro, G., 54:109-33
 Pollard, T. D., 53:653-81
 Potten, C. S., 56:399-417
 Pouysségur, J., 54:195-210
 Preston, R. R., 53:309-19
 Pyeritz, R. E., 56:763-96
- R
- Rand, M. J., 57:659-82
 Rasmussen, R. L., 54:279-302
 Reeves, W. B., 54:29-50
 Reuss, L., 53:361-73
 Riordan, J. R., 55:609-30
 Rios, E., 54:109-33
 Role, L. W., 57:521-46
 Ross, R., 57:791-804
 Rossier, B. C., 53:565-84
 Ruben, J., 57:69-95
 Ryan, K. W., 55:785-817
- S
- Sackin, H., 54:81-96; 57:333-53
 Saimi, Y., 53:309-19
 Sanders, K. M., 54:439-53
 Schatzmann, H. J., 57:1-18
 Schleicher, M., 53:607-28
 Schmidt, D. J., 54:257-77
 Schmidt-Nielsen, K., 56:1-12
 Schneider, M. D., 53:179-200
 Schneider, M. F., 56:463-84
 Schroer, T. A., 53:629-52
 Schulman, H., 57:417-45
 Schuster, V. L., 55:267-88
 Segal, Y., 53:361-73
 Semrad, C. E., 55:631-55
 Seuwren, K., 54:195-210
 Sheetz, M. P., 53:629-52
 Shenolikar, S., 55:289-304
 Sherman, M. P., 54:331-50
 Shiffer, K., 53:375-94
 Shore, S. A., 57:151-70
 Simonson, M. S., 55:249-65
 Singer, W., 55:349-74
 Smith, P. R., 53:509-30
 Snyder, S. H., 54:469-88

- Soifer, S. J., 57:115-34
 Somero, G. N., 54:557-77; 57:43-68
 Spicer, A. P., 57:607-34
 Springer, T. A., 57:827-72
 Stanley, E., 57:635-57
 Staub, N. C., 56:47-67
 Stefani, E., 54:109-33
 Steil, G. M., 54:861-83
 Stengl, M., 54:665-81
 Stiles, G. L., 54:211-25
 Storey, J. M., 54:619-37
 Storey, K. B., 54:619-37
 Strauss, H. C., 54:279-302
 Stuehr, D. J., 57:707-36
 Sun, X. P., 54:395-414
 Surprenant, A., 56:117-40
 Szwergold, B. S., 54:775-98
- T
 Tabak, L. A., 57:547-64
 Takahashi, J. S., 55:729-53
 Taylor, L., 55:785-817
 Thorens, B., 55:591-608
 Thorner, J., 53:37-57
- U
 Trautwein, W., 52:257-74, 275-92
 Tsien, R. Y., 55:755-84
- V
 Umans, J. G., 57:771-90
 Urata, H., 56:811-29
- W
 V.Shah, S., 57:245-62
 van Golde, L. M. G., 53:441-64
 Van Houten, J., 54:639-63
 van-Bilsen, M., 55:77-95
 Vary, T. C., 56:321-48
 Vatner, D. E., 53:137-59
 Vatner, S. F., 53:137-59
 Verkman, A., 54:97-108
- Y
 Yakel, J. L., 57:447-68
 Yazaki, Y., 55:55-75
- Z
 Wagner, J., 56:811-29
 Wang, W., 54:81-96
 Wasserman, D. H., 57:191-218
 Watanabe, R. M., 54:861-83
 Weidmann, S., 55:1-13
- Weinman, E. J., 55:289-304
 Weinstein, A. M., 56:691-709
 Weinstein, H., 56:213-36
 Wiener-Kronish, J. P., 55:209-26
 Willenbacher, R. F., 54:395-414
 Williams, D. S., 54:799-826
 Williams, M. C., 54:351-71
 Williams, S., 54:489-505
 Wingo, C. S., 55:323-47
 Wolin, M. S., 57:737-69
 Wood, S. C., 53:71-85
 Woodruff, T. K., 57:219-44
 Wright, E. M., 55:575-89
 Wright, J. R., 53:395-414
 Wu, S. M., 56:141-68
- Zhu, H., 55:77-95
 Zot, H. G., 53:653-81



CUMULATIVE TITLES

CHAPTER TITLES, VOLUMES 53-57

CARDIOVASCULAR PHYSIOLOGY

β-Adrenergic Receptor Regulation in the Heart in Pathophysiologic States: Abnormal Adrenergic Responsiveness in Cardiac Disease	C. J. Homcy, S. F. Vatner, D. E. Vatner	53:137-59
Control of Growth and Differentiation of Vascular Cells by Extracellular Matrix Proteins	D. J. Carey	53:161-77
Growth Factors, Proto-Oncogenes, and Plasticity of the Cardiac Phenotype	T. G. Parker, M. D. Schneider	53:179-200
Hormones, Growth Factors, and Myogenic Differentiation	J. R. Florini, D. Z. Ewton, K. A. Magri	53:201-16
Regulators of Angiogenesis	M. Klagsbrun, P. A. D'Amore	53:217-39
Adenosine Receptors	G. L. Stiles, M. E. Olah	54:211-25
Cardiac Actions of Angiotensin II: Role of an Intracardiac Renin-Angiotensin System	K. M. Baker, G. W. Booz, D. E. Dostal	54:227-41
Cellular Mechanisms of Myocardial Stunning Endothelin and Calcium Dynamics in Vascular Smooth Muscle	H. Kusuoka, E. Marban	54:243-56
Ionic Current Mechanisms Generating Vertebrate Primary Cardiac Pacemaker Activity at the Single Cell Level	R. F. Highsmith, K. Blackburn, D. J. Schmidt	54:257-77
Control of Cardiac Gene Expression by Mechanical Stress	D. L. Campbell, R. L. Rasmussen, H. C. Strauss	54:279-302
Transcriptional Regulation During Cardiac Growth and Development	I. Komuro, Y. Yazaki	55:55-75
Transgenic Mice in Cardiovascular Research Complex Models for the Study of Gene Function in Cardiovascular Biology	K. R. Chien, H. Zhu, K. U. Knowlton, W. Miller-Hance, M. van-Bilsen, T. X. O'Brien, S. M. Evans	55:77-95
Molecular Genetic Approaches to the Study of Human Cardiovascular Disease	L. J. Field	55:97-114
Insights into Lipoprotein Metabolism from Studies in Transgenic Mice	E. G. Nabel, G. J. Nabel	56:741-61
Transgenic Rats: New Experimental Models for the Study of Candidate Genes in Hypertension Research	H. C. Dietz, III, R. E. Pyeritz	56:763-96
Cell Biology of Atherosclerosis	J. L. Breslow	56:797-810
Angiotensin-Converting Enzyme Inhibition and Ventricular Remodeling after Myocardial Infarction	M. Paul, S. Hoffmann, H. Urata, J. Wagner, D. Ganter R. Ross	56:811-29 57:791-804
Traffic Signals on Endothelium for Lymphocyte Recirculation and Leukocyte Emigration	J. M. Pfeffer, T. A. Fischer, M. A. Pfeffer	57:805-26
	T. A. Springer	57:827-72

CELL PHYSIOLOGY

Methods for Measurement of Intracellular Magnesium: NMR and Fluorescence	R. E. London	53:241-58
Mechanisms of Magnesium Transport	P. W. Flatman	53:259-71
Cellular Magnesium and Na/Mg Exchange in Heart Cells	E. Murphy, C. C. Freudenberg, M. Lieberman	53:273-87
Magnesium Gating of the Inwardly Rectifying K ⁺ Channel	H. Matsuda	53:289-98
Modulation of Cardiac Ion Channels by Magnesium	Z. S. Agus, M. Morad	53:299-307
Calmodulin Mutants and Ca ²⁺ -Dependent Channels in <i>Paramecium</i>	R. R. Preston, J. A. Kink, R. D. Hinrichsen, Y. Saimi, C. Kung	53:309-19
Charge Movement and the Nature of Signal Transduction in Skeletal Muscle	E. Rios, G. Pizarro, E. Stefani	54:109-33
Excitation-Contraction Coupling	A. S. French	54:135-52
Mechanotransduction	U. B. Kaupp, K. Koch	54:153-75
Role of cGMP and Ca ²⁺ in Vertebrate Photoreceptor Excitation and Adaptation	J. C. Lawrence, Jr.	54:177-93
Signal Transduction and Protein Phosphorylation in the Regulation of Cellular Metabolism by Insulin	J. Pouysségur, K. Seuwen	54:195-210
Transmembrane Receptors and Intracellular Pathways That Control Cell Proliferation	C. Fewtrell	55:427-54
Ca ²⁺ Oscillations in Non-Excitable Cells	D. DiFrancesco	55:455-72
Pacemaker Mechanisms in Cardiac Tissue	D. D. Busath	55:473-501
The Use of Physical Methods in Determining Gramicidin Channel Structure and Function	P. A. Janmey	56:169-91
Phosphoinositides and Calcium as Regulators of Cellular Actin Assembly and Disassembly	I. B. Levitan	56:193-212
Modulation of Ion Channels by Protein Phosphorylation and Dephosphorylation	H. Weinstein, E. L. Mehler	56:213-36
Ca ²⁺ -Binding and Structural Dynamics in the Functions of Calmodulin	S. H. Francis, J. D. Corbin	56:237-72
Structure and Function of Cyclic Nucleotide-Dependent Protein Kinases	N. Granger, R. J. Korthuis	57:311-32
Physiologic Mechanisms of Post-Ischemic Tissue Injury	H. Sackin	57:333-53
Review of Mechanosensitive Channels	R. L. Barchi	57:355-85
Molecular Pathology of the Skeletal Muscle Sodium Channel	D. C. Gadsby, G. Nagel, T. Hwang	57:387-416
The CFTR Chloride Channel of Mammalian Heart	A. P. Braun, H. Schulman	57:417-45
The Multifunctional Calcium/Calmodulin-Dependent Protein Kinase:		

COMPARATIVE PHYSIOLOGY

Adaptations to Hypoxia in Birds: How to Fly High	F. M. Faraci	53:59-70
Interactions Between Hypoxia and Hypothermia	S. C. Wood	53:71-85
Intermittent Breathing in Vertebrates	W. K. Milsom	53:87-105
Ontogeny of Cardiovascular and Respiratory Physiology of Lower Vertebrates	W. W. Burggren, A. W. Pinder	53:107-35
Adaptations to High Hydrostatic Pressure	G. N. Somero	54:557-77
Anhydrobiosis	J. H. Crowe, F. A. Hoekstra, L. M. Crowe	54:579-99
Mechanisms for Anoxic Survival in the Vertebrate Brain	P. L. Lutz	54:601-18
Natural Freeze Tolerance in Ectothermic Vertebrates	K. B. Storey, J. M. Storey	54:619-37

Comparative Aspects of Muscle Capillary Supply	O. Mathieu-Costello	55:503-25
Contraction Dynamics and Power Output of Skeletal Muscle	R. K. Josephson	55:527-46
Limits to Maximal Performance	J. H. Jones, S. L. Lindstedt	55:547-69
Thermogenesis in Muscle	B. A. Block	56:535-77
Evolutionary Physiology	T. Garland, Jr., P. A. Carter	56:579-621
Thermal Adaptations in Biological Membranes: Is Homeoviscous Adaptation the Explanation?	J. R. Hazel	57:19-42
Proteins and Temperature	G. N. Somero	57:43-68
The Evolution of Endothermy in Mammals and Birds: From Physiology to Fossils	J. Ruben	57:69-95

ENDOCRINOLOGY

Thyroid Hormone Regulation of Gene Expression	G. A. Brent, D. D. Moore, P. R. Larsen	53:17-35
Receptor-G Protein Signaling in Yeast	K. J. Blumer, J. Thorner	53:37-57
Regulation of Net Hepatic Glucose Uptake In Vivo	M. J. Pagliassotti, A. D. Cherrington	54:847-60
Modeling of Insulin Action In Vivo	R. N. Bergman, G. M. Steil, D. C. Bradley, R. M. Watanabe	54:861-83
Molecular Physiology of the Regulation of Hepatic Gluconeogenesis and Glycolysis	S. J. Pilkis, D. K. Granner	54:885-909
Mammalian Facilitative Glucose Transporter Family: Structure and Aldosterone Action	J. E. Pessin, G. I. Bell	54:911-30
The Insulin-like Growth Factors	J. W. Funder	55:115-30
Role of ATP in Insulin Actions	W. S. Cochick, D. R. Clemons	55:131-53
Calcium and Hormone Action	H. Makino, V. C. Manganiello, T. Kono	56:273-95
Regulation of Protein Synthesis by Insulin	O. H. Petersen, C. C. H. Petersen, H. Kasai	56:297-319
Phosphoinositide Phospholipases and G Proteins in Hormone Action	S. R. Kimball, T. C. Vary, L. S. Jefferson	56:321-48
Endothelium as an Endocrine Organ	J. H. Exton	56:349-69
Regulation of Glucose Fluxes During Exercise in the Postabsorptive State	T. Inagami, M. Naruse, R. Hoover	57:171-89
Inhibin, Activin, and the Female Reproductive Axis	D. H. Wasserman	57:191-218
	T. K. Woodruff, J. P. Mather	57:219-44

GASTROINTESTINAL PHYSIOLOGY

Ion Channels and Colonic Salt Transport	D. C. Dawson	53:321-39
Surface Charges and Ion Channel Function	W. N. Green, O. S. Andersen	53:341-59
Regulation of Ion Transport Across Gallbladder Epithelium	L. Reuss, Y. Segal, G. Altenberg	53:361-73
Contraction Coupling in Colonic Smooth Muscle	E. A. Mayer, X. P. Sun, R. F. Willenbacher	54:395-414
Hepatic Transport Systems Regulating pH, Cell Volume, and Bi Secretion	J. L. Boyer, J. Graf, P. J. Meier	54:415-38
Ionic Mechanisms of Electrical Rhythmicity in Gastrointestinal Smooth Muscles	K. M. Sanders	54:439-53
The Molecular Basis of GI Transport	D. C. Dawson	55:571-73
The Intestinal Na⁺/Glucose Cotransporter	E. M. Wright	55:575-89
Facilitated Glucose Transporters in Epithelial Cells	B. Thorens	55:591-608
The Cystic Fibrosis Transmembrane Conductance Regulator	J. R. Riordan	55:609-30

Toxigenic Diarrheas, Congenital Diarrheas and Cystic Fibrosis: Disorders of Intestinal Ion Transport	M. Field, C. E. Semrad	55:631-55
Vesicle Targeting and Ion Secretion in Epithelial Cells: Implications for Cystic Fibrosis	A. P. Morris, R. A. Frizzell	56:371-97
Primary Cultures for Studies of Cell Regulation and Physiology in Intestinal Epithelium	G. S. Evans, N. Flint, C. S. Potten	56:399-417
Pancreatic Duct Cell Cultures	S. Githens	56:419-43
Parietal Cell Culture: New Models and Directions	C. S. Chew	56:445-61
In Defense of the Oral Cavity: Structure, Biosynthesis, and Function of Salivary Mucins	L. A. Tabak	57:547-64
The Hydrophobic Barrier Properties of Gastrointestinal Mucus	L. M. Lichtenberger	57:565-83
Signal Transduction, Packaging, and Secretion of Mucins	G. Forstner	57:585-605
Epithelial Mucin Genes	S. J. Gendler, A. P. Spicer	57:607-34
Mucin Biophysics	R. Bansil, J. T. LaMont, E. Stanley	57:635-57
NEUROPHYSIOLOGY		
The Electrophysiology of Hair Cells	J. F. Ashmore	53:465-76
Strategies for Studying Permeation at Voltage-Gated Ion Channels	H. A. Lester	53:477-96
Regulation of Adrenergic Receptor Responsiveness Through Modulation of Receptor Gene Expression	S. Collins, M. G. Caron, R. J. Lefkowitz	53:497-508
Insolitol 1,4,5-Trisphosphate-Activated Calcium Channels	C. D. Ferris, S. H. Snyder	54:469-88
NMDA-Receptor-Independent Long-Term Potentiation	D. Johnston, S. Williams, D. Jaffe, R. Gray	54:489-505
Molecular Neurobiology of Glutamate Receptors	G. P. Gasic, M. Hollmann	54:507-35
Structural Elements Involved in Specific K ⁺ Channel Function	L. Y. Jan, Y. N. Jan	54:537-55
Structural Changes Accompanying Memory Storage	C. H. Bailey, E. R. Kandel	55:397-426
Synchronization of Cortical Activity and Its Putative Role in Information Processing and Learning	W. Singer	55:349-74
The Mechanism of Expression of Long-term Enhancement of Hippocampal Synapses: Current Issues and Theoretical Implications	B. L. McNaughton	55:375-96
Nucleus Tractus Solitarius - Gateway to Neural Circulatory Control	M. C. Andresen, D. L. Kunze	56:93-116
Control of the Gastrointestinal Tract by Enteric Neurons	A. Surprenant	56:117-40
Synaptic Transmission in the Outer Retina	S. M. Wu	56:141-68
The 5-HT ₃ Receptor Channel	M. B. Jackson, J. L. Yakel	57:447-68
Mechanisms of Activation of Muscle Nicotinic Acetylcholine Receptors and the Time Course of Endplate Currents	B. Edmonds, A. J. Gibb, D. Colquhoun	57:469-93
Mechanisms of Activation of Glutamate Receptors and the Time Course of Excitatory Synaptic Currents	B. Edmonds, A. J. Gibb, D. Colquhoun	57:495-519
Physiological Diversity of Nicotinic Acetylcholine Receptors Expressed by Vertebrate Neurons	D. S. McGehee, L. W. Role	57:521-46

PREFATORY CHAPTERS

Excitation-Contraction Coupling and the Mechanism of Muscle Contraction	S. Ebashi	53:1-16
Methods in Kidney Physiology: Past, Present, and Future	F. Morel	54:1-9
Cardiac Action Potentials, Membrane Currents, and Some Personal Reminiscences	S. Weidmann	55:1-13
Temporal Organization: Reflections of a Darwinian Clock-Watcher	C. S. Pittendrigh	55:17-54
About Curiosity and Being Inquisitive	K. Schmidt-Nielsen	56:1-12
Amarcord	H. J. Schatzmann	57:1-18

RENAL AND ELECTROLYTE PHYSIOLOGY

Epithelial Na ⁺ Channels	P. R. Smith, D. J. Benos	53:509-30
The Calcium Pumping ATPase of the Plasma Membrane	E. Carafoli	53:531-47
The Band 3-Related Anion Exchanger (AE) Gen Family	S. L. Alper	53:549-64
Structure-Function Relationship of Na,K-ATPase	J.-D. Horisberger, V. Lemass, J.-D. Kraehenbuhl, B. C. Rossier	53:565-84
Receptors of Atrial Natriuretic Factor	T. Maack	54:11-27
Renal Epithelial Chloride Channels	W. B. Reeves, T. E. Andreoli	54:29-50
Epithelial Na Channels: Function and Diversity	L. G. Palmer	54:51-66
Parathyroid Hormone Receptors in Control of Proximal Tubule Function	R. Muff, J. A. Fischer, J. Biber, H. Murer	54:67-79
Renal Potassium Channels and Their Regulation	W. Wang, H. Sackin, G. Giebisch	54:81-96
Water Channels in Cell Membranes	A. Verkman	54:97-108
Endothelin Peptides and the Kidney	M. S. Simonson, M. J. Dunn	55:249-65
Function and Regulation of Collecting Duct Intercalated Cells	V. L. Schuster	55:267-88
Regulation of the Renal Brush Border Membrane Na ⁺ -H ⁺ Exchanger	E. J. Weinman, S. Shenolikar	55:289-304
Role of Growth Factors in Regulation of Renal Growth	M. R. Hammerman, M. O'Shea, S. B. Miller	55:305-21
The Renal H-K-ATPase: Physiological Significance and Role in Potassium Homeostasis	C. S. Wingo, B. D. Cain	55:323-47
Ammonium Transport by the Thick Ascending Limb of Henle's Loop	D. W. Good	56:623-47
Novel Aspect of Angiotensin Receptors and Signal Transduction in Renal Stem Cells and the Lineage of the Nephron	J. G. Douglas, U. Hopfer	56:649-69
Mathematical Models of Tubular Transport	D. Herzlinger	56:671-89
Hormonal Signaling and Regulation of Salt and Water Transport in the Collecting Duct	A. M. Weinstein	56:691-709
The Role of Reactive Oxygen Metabolites in Glomerular Disease	M. D. Breyer, Y. Ando	56:711-39
Progression of Renal Disease and Renal Hypertrophy	S. V. Shah	57:245-62
Transforming Growth Factor-Beta and Angiotensin II: The Missing Link from Glomerular Hyperfiltration to Glomerulosclerosis?	T. H. Hostetter	57:263-78
Role of Platelet-Derived Growth Factor in Renal Injury	M. Ketteler, N. A. Noble, W. A. Border	57:279-95
	H. E. Abboud	57:297-309

RESPIRATORY PHYSIOLOGY

Structures and Properties of the Surfactant-Associated Proteins	S. G. Hawgood, K. Shiffer	53:375-94
Regulation of Pulmonary Surfactant Secretion and Clearance	J. R. Wright, L. G. Dobbs	53:395-414
Hormonal Control of the Surfactant System in Fetal Lung	C. R. Mendelson, V. Boggaram	53:415-40
Synthesis and Assembly of Lung Surfactant	H. P. Haagsman, L. M. G. van Golde	53:441-64
Arachidonic Acid Metabolism in Airway Epithelial Cells	M. Holtzman	54:303-29
Host Defense in Pulmonary Alveoli	M. P. Sherman, T. Ganz	54:331-50
Pulmonary Alveolar Epithelial Cell Differentiation	J. S. Brody, M. C. Williams	54:351-71
Developmental Changes in Lung Epithelial Ion Transport and Liquid Movement	D. W. Nielson, R. D. Bland	54:373-94
Mechanical Factors in Lung Liquid Distribution	S. J. Lai-Fook	55:155-79
Gene Transfection of Lung Cells in Vivo and in Vitro	T. A. Hazinski	55:181-207
Interrelationship of Pleural and Pulmonary Interstitial Liquid	J. P. Wiener-Kronish, V. C. Broaddus	55:209-26
Neutrophil-Endothelial Cell Interactions in the Lung	M. H. Gee, K. H. Albertine	55:227-48
Epithelial-Mesenchymal Interactions in Lung Development	P. Minoo, R. J. King	56:13-45
Pulmonary Intravascular Macrophages	N. C. Staub	56:47-67
Pulmonary Reflexes: Neural Mechanisms of Pulmonary Defense	H. M. Coleridge, J. C. G. Coleridge	56:69-91
Leukocyte Traffic in the Lung	J. C. Hogg, C. M. Doerschuk	57:97-114
Regulation of Pulmonary Vascular Tone in the Perinatal Period	J. R. Fineman, S. J. Soifer, M. A. Heymann	57:115-34
Extracellular Metabolism of Pulmonary Surfactant: The Role of a New Serine Protease	N. J. Gross	57:135-50
Chemical Regulation of Pulmonary Airway Tone	J. M. Drazen, B. Gaston, S. A. Shore	57:151-70

SPECIAL TOPICS**CHEMOSENSORY TRANSDUCTION**

Chemosensory Transduction in Eukaryotic Microorganisms	J. Van Houten	54:639-63
Peripheral Processes in Insect Olfaction	M. Stengl, H. Hatt, H. Breer	54:665-81
Behavioral Responses in Bacteria	J. P. Armitage	54:683-714
Chemosensory Transduction Mechanisms in Taste	S. C. Kinnamon, T. A. Cummings	54:715-31

CIRCADIAN RHYTHMS

Circadian Rhythms	M. Menaker	55:657-59
Formal Approaches to Understanding Biological Oscillators	W. O. Friesen, G. D. Block, C. G. Hocker	55:661-81
Genetic Analysis of Circadian Clocks	J. C. Dunlap	55:683-728
Molecular Approaches to Understanding Circadian Oscillations	J. S. Takahashi, J. M. Kornhauser, C. Koumenis, A. Eskin	55:729-53

EXCITATION-CONTRACTION COUPLING

Control of Calcium Release in Functioning Skeletal Muscle Fibers	M. F. Schneider	56:463-84
Ryanodine Receptor/Ca ²⁺ Release Channels and Their Regulation	G. Meissner	56:485-508

Structure and Development of E-C Coupling Units in Skeletal Muscle	C. Franzini-Armstrong, A. O. Jorgensen	56:509-34
MOTILITY		
The Role of Actin Polymerization in Cell Motility	J. A. Cooper	53:585-605
Genetic Alteration of Proteins in Actin-Based Motility Systems	G. Gerisch, A. A. Noegel, M. Schleicher	53:607-28
Functions of Microtubule-Based Motors Myosin-I	T. A. Schroer, M. P. Sheetz T. D. Pollard, S. K. Doberstein, H. G. Zot	53:629-52 53:653-81
NITRIC OXIDE		
Nitric Oxide as an Neurotransmitter in Peripheral Nerves: Nature	M. J. Rand, C. G. Li	57:659-82
Nitric Oxide Signaling in the Central Nervous System	J. Garthwaite, C. L. Boulton	57:683-706
Nitric Oxide Synthases: Properties and Catalytic Mechanism	O. W. Griffith, D. J. Stuehr	57:707-36
Nitric Oxide: Pathophysiological Mechanisms	S. S. Gross, M. S. Wolin	57:737-69
Nitric Oxide in the Regulation of Blood Flow and Arterial Pressure	J. G. Umans, R. Levi	57:771-90
NMR		
Nuclear Magnetic Resonance and Its Applications to Physiological Solving Solution Structures of Physiologically Relevant Proteins	R. J. Gillies	54:733-48
NMR Spectroscopy of Cells Application of Localized in Vivo NMR to Whole Organ Physiology in the Animal	N. E. MacKenzie, P. R. Gooley, L. A. Hardaway	54:749-73
The Utilization of Magnetic Resonance Imaging in Physiology	B. S. Szwergold	54:775-98
A. P. Koretsky, D. S. Williams	54:799-826	
J. R. Alger, J. A. Frank	54:827-46	
QUANTITATIVE MICROSCOPY		
Controlling Cell Chemistry with Caged Compounds	S. R. Adams, R. Y. Tsien	55:755-84
Multimode Light Microscopy and the Dynamics of Molecules, Cells,	D. L. Farkas, G. Baxter, R. L. DeBiasio, A. Gough, M. A. Nederlof, D. Pane, J. Pane, D. R. Patck, K. W. Ryan, D. L. Taylor	55:785-817